Date 2001-06-20	ISO/IS 10303-24
Secretariat	ISO/TC 184/SC4
ANSI/NIST	WG11 N165

Report of Voting/Annex B

MEMBER	COMMENTS	OBSERVATIONS OF THE
BODY		PROJECT
USA	ISSUE NUMBER: USA-1	Accepted
	CLAUSE: 6.8.1	
	CLASSIFICATION: Technical, minor	
	DESCRIPTION:	
	Memory Management Issues Get Attribute (Explicit)	
	When a derived attribute is accessed, new, non-persistent, entity instances	
	may be created (depending on the EXPRESS definition of the attribute).	
	Neither Part 22 nor Part 24 specifies how these instances should be managed.	
	Part 24 needs to specify minimal lifetime for these temporary instances to be	
	available (the way it does for strings, binaries, and enumerations in 4.3.3).	
	Part 203 includes several examples of such derived attributes including	
	axis1_placement_2d.z:	
	ENTITY axis1_placement	
	SUBTYPE OF (placement);	
	axis : OPTIONAL direction;	
	DERIVE	
	z : direction := NVL(normalise(axis),direction([0,0,1]));	
	WHERE	
	WR1: SELF\geometric_representation_item.dim = 3;	
	END_ENTITY; axis1_placement	

Date 2001-06-20	ISO/IS 10303-24
Secretariat	ISO/TC 184/SC4
ANSI/NIST	WG11 N165

MEMBER	COMMENTS	OBSERVATIONS OF THE
BODY		PROJECT
	PROPOSED SOLUTION:	
	Proposed Solution 1:	
	The temporary instances will only be available until the next derived	
	attribute is accessed.	
	Proposed Solution 2:	
	Add two functions to the API:	
	sdaiDeleteDerivedValues (SdaiInstance, SdaiAttr att);	
	sdaiDeleteDerivedValuesBN (SdaiInstance, SdaiAttr att);	
	The temporary instances created for a specific attribute of an instance will	
	be available until the application programmer requests that they be deleted.	
	RESOLUTION	
	Updated 4.3.3 to reflect the first proposed solution	
USA	ISSUE NUMBER: USA-2	Accepted
	CLAUSE: 6.8.1	
	CLASSIFICATION: Technical, minor	
	DESCRIPTION:	
	Memory Management Issues Get Attribute (Explicit)	
	For inverse attributes, Part 22 (10.10.1) specifies that a NPL is created, but	
	this then places a burden on the application programmer to know that the	
	attribute being accessed is inverse, and then explicitly delete the NPL which	
	was implicitly created.	

Date 2001-06-20	ISO/IS 10303-24
Secretariat	ISO/TC 184/SC4
ANSI/NIST	WG11 N165

MEMBER	COMMENTS	OBSERVATIONS OF THE
BODY		PROJECT
	PROPOSED SOLUTION:	
	Proposed Solution 1:	
	The NPL implicitly created for an inverse attribute shall be valid (only)	
	until the next call that evaluates an inverse attribute.	
	Proposed Solution 2:	
	The NPL must be explicitly deleted with sdaiDeleteNPL() by the application	
	programmer. (This is just an editorial change)	
	RESOLUTION	
	Updated 4.3.3 to reflect the first proposed solution	
USA	ISSUE NUMBER: USA-3	Accepted
	CLAUSE: 6.8.1, 6.10.7, 6.13.1	
	CLASSIFICATION: Technical, minor	
	DESCRIPTION:	
	The standard is unclear when doing an sdaiGetXXX operation with an ADB	
	parameter, if the ADB is implicitly created by the get function. Which of the	
	following patterns is correct?	
	Pattern 1:	
	SdaiADB adb;	
	sdaiGetAttrBN (inst, "foo", sdaiADB, &adb);	

Date 2001-06-20	ISO/IS 10303-24
Secretariat	ISO/TC 184/SC4
ANSI/NIST	WG11 N165

MEMBER BODY	COMMENTS	OBSERVATIONS OF THE PROJECT
	Pattern 2: SdaiADB = sdaiCreateEmptyADB(); sdaiGetAttrBN (inst, "foo", sdaiADB, &adb);	
	RESOLUTION Clarified the descriptions of 6.8.1, 6.8.13.1, 6.10.7 and 6.13.1 to indicate that the pattern #2 must be used.	